Claim Amendments

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A process for producing metallic honeycomb bodies, which comprises the steps of:

performing at least one of stacking of and winding of at least partially structured metal foils for forming a honeycomb structure having passages defined therein;

heating the metal foils using at least one radiation heater from an open end face of the passages, the radiation heater generating a targeted infrared heating radiation and the honeycomb structure, at least in at least one partial region, reaching a temperature of 800° to 1200° C within a time of 5 to [[30]] 10 seconds during the heating step; and

connecting the metal foils to one another by joining in the partial region.

Claim 2 (cancelled).

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Claim 3 (original): The process according to claim 1, which further comprises:

forming the passages of the honeycomb structure to run substantially parallel to an axis of the honeycomb structure; and

directing heating radiation onto an end side of the honeycomb structure for heating the honeycomb structure only in the partial region to an axial depth which is less than an axial length of the passages.

Claim 4 (original): The process according to claim 1, which further comprises:

introducing the metal foils at least partially into a tubular jacket before performing the heating step;

connecting the metal foils to one another by joining;

inserting the metal foils completely into the tubular jacket; and

connecting a number of the metal foils to the tubular jacket by joining.

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Claim 5 (original): The process according to claim 4, which further comprises introducing the metal foils completely into the tubular jacket, with the tubular jacket projecting beyond end sides of the honeycomb structure.

Claim 6 (original): The process according to claim 4, which further comprises disposing the metal foils, before being heated, on an outside of an inner tube and forming the metal foils to form the passages running substantially transversely with respect to the inner tube, with a number of the metal foils being connected to the inner tube by joining.

Claim 7 (original): The process according to claim 6, which further comprises heating inductively one of sections of the tubular jacket and of the inner tube that adjoin the partial region of the honeycomb structure.

Claim 8 (original): The process according to claim 1, which further comprises completely heating at least one end side of the honeycomb structure to a predeterminable depth.

Claim 9 (original): The process according to claim 1, which further comprises:

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forming the passages of the honeycomb structure to run substantially parallel to an axis of the honeycomb structure; and

varying a heating depth of the partial region, a heating in the partial region of the honeycomb structure disposed on a radially outer side reaching a greater depth than a heating of the partial region disposed on a radially inner side.

Claim 10 (original): The process according to claim 1, which further comprises impinging heating radiation on a end side at an angle of between 10° and 80°.

Claim 11 (original): The process according to claim 1, which further comprises moving the honeycomb structure relative to the radiation heater during the heating step.

Claim 12 (original): The process according to claim 11, which further comprises forcing the radiation heater to undergo a relative rotational movement about an axis of the honeycomb structure.

Claim 13 (original): The process according to claim 11, which further comprises rotating the honeycomb structure about the axis.

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Claim 14 (original): The process according to claim 11, which further comprises varying an angle between a radiation axis of radiation heat produced by the radiation heater and the axis of the honeycomb structure.

Claim 15 (original): The process according to claim 1, which further comprises producing connections by joining by at least one of soldering, sintering, and diffusion welding.

Claim 16 (original): The process according to claim 15, which further comprises disposing one of a solder and a diffusion promoter in the partial region prior to the heating step used to form the connections by joining.

Claim 17 (original): The process according to claim 15, which further comprises producing the connections by joining under a shielding gas.

Claim 18 (withdrawn): A device for producing metallic honeycomb bodies, comprising:

a positioning surface for positioning a honeycomb body during a heating operation; and

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at least one radiation heater having a radiation axis, said positioning surface and said radiation axis of said radiation heater are disposed with respect to each other at an angle of 10° to 80°.

Claim 19 (withdrawn): The device according to claim 18, wherein said positioning surface is pivotable, so that the angle is adjustable.

Claim 20 (withdrawn): The device according to claim 18, wherein said radiation heater is pivotable, so that the angle is adjustable.

Claim 21 (withdrawn): The device according to claim 18, wherein a distance between said positioning surface and said radiation heater is variable.

Claim 22 (withdrawn): The device according to claim 18, wherein said radiation heater can move on predeterminable paths relative to said positioning surface.

Claim 23 (withdrawn): The device according to claim 18, wherein said positioning surface has a holding device for fixing the honeycomb body.

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Claim 24 (withdrawn): The device according to claim 18, wherein said positioning surface is part of a conveyor belt.

Claim 25 (withdrawn): The device according to claim 18, further comprising mirrors disposed around said positioning surface for diverting heating radiation.

Claim 26 (withdrawn): The device according to claim 18, further comprising an apparatus for generating a local shielding gas atmosphere.

Claim 27 (withdrawn): The device according to claim 26, wherein said apparatus is a housing at least partially enclosing the honeycomb body.

Claim 28 (withdrawn): The device according to claim 18, wherein said radiation heater is an infrared radiation heater.

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